CLAIMS

We Claim:

1. A method of receiving information from a content provider and transmitting the information to a user terminal, comprising:

receiving information from the content provider;

displaying at least a portion of the information on the user terminal;

monitoring the information from the content provider to determine if any of the portion of the information being displayed on the user terminal has changed;

updating the information from the content provider that has changed; and

transmitting the information from the content provider that has changed to the user terminal.

2. The method recited in claim 1, wherein the information comprises a plurality of real-time data values from the content provider.

3. The method recited in claim 2, wherein the updating of information from the content provider further comprises:

accessing a hash table containing a plurality of prior real-time data values using a plurality of keys associated with the plurality of real-time data values;

determining whether the plurality of real-time data values received from content provider has changed from the prior plurality of real-time data values contained in the hash table; and

updating the prior plurality real-time data values contained in the hash table with the plurality of real-time values received from the content provider when the plurality of real-time data values received from content provider has changed from the plurality of prior real-time data values contained in the hash table.

4. The method recited in claim 3, wherein the transmitting of the plurality of real-time data values that have been updated in the hash table to the user terminal further comprises:

activating a data thread when a real-time data value of the plurality of prior real-time data values is updated in the hash table;

determining the position on a screen in the user terminal corresponding to the real-time data value;

transmitting the real-time data value to the user terminal; and

displaying the time real-time data value on the screen in the user terminal in the position indicated.

5. The method recited in claim 4, wherein the data thread is activated using remote method invocation.

6. The method recited in claim 3, further comprising:

requesting a connection by the user terminal;

spawning a data server thread;

retrieving a user defined portfolio by the data thread containing a plurality of keys;

generating activated HTML page containing an embedded applet and downloading to the user terminal; and

monitoring the plurality of keys contained in the user defined portfolio and identifying currently active keys of said of the plurality of keys.

7. The method recited in claim 6, comprising:

reading the currently active keys;

determining if the currently active keys have changed;

updating the hash table with the real-time data values for currently active keys; and

downloading real-time values for the currently active keys that have changed from the hash table to the user terminal.

8. The method recited in claim 7, comprising:

determining whether a shutdown request was made; and

disconnecting all connections to the user terminal when the shutdown request was made.

9. The method recited in claim 8, comprising:

retrieving the plurality of real-time data values on a periodic basis.

10. The method recited in claim 9, comprising:

notifying data server thread when a real-time data value of the plurality of data that values has changed.

11. The method recited and claim 6, comprising:

activating an embedded applet received from the data server thread in the user terminal;

determining whether a page changed is required;

informing to the data server thread of a plurality of new active keys;

receiving the plurality of real-time data values from the data server thread; and

updating the screen on the user terminal associated with each time data value of the plurality of real-time data values.

12. A computer program executable by computer and embodied on a computer readable medium for receiving a plurality of real-time data values from a content provider and transmitting the real-time data values to a user terminal, comprising:

a user terminal code segment to receive real-time data values; and

a real-time data server code segment to receive real-time data values from a content provider, determine if the real-time data values have changed from prior

real-time and transmit the real-time data values to the user terminal when the real-time data values have changed from the prior real-time data values.

13. The computer program recited in claim 12, wherein the real-time data server code segment further comprises:

a hash table storing the prior real-time data values and being updated when the real-time data values from the content provider have changed from the prior real-time data values.

14. The computer program recited in claim 13, wherein the real-time data server further comprises:

a web engine server module code segment to access a database having a portfolio generated by a user and generate an HTML page and applet, wherein upon receipt of a connection request from the user terminal the web engine server module code segment downloads the HTML page and applet to the user terminal code segment.

15. The computer program recited in claim 13, wherein the real-time data server further comprises:

a source filter server module code segment to receive real-time data values from a content provider and determine if the real-time data values have changed from prior real-time data values stored and table, and activate a data thread code

segment when the real-time data values have changed from prior real-time data values.

16. The computer program recited in claim 15, wherein the real-time data server further comprises:

a real time data server module code segment to communicate between the user terminal code segment and the source filter server module code segment through the data server thread code segment.

17. The computer program recited in claim 16, where and source filter server module further comprises:

a source filter module code segment to receive the real-time data values from the values content provider; and update the hash table.

18. The computer program recited in claim 13, wherein the user terminal further comprises:

a HTML page and JavaScript module code segment to display a screen on the user terminal code segment; and

an embedded applet code segment to update the screen for the user terminal code segment when the time data values are received from the real-time data server.

19. The computer program recited in claim 13, wherein the web engine server module further comprises:

a web server module code segment to communicate to the user terminal code segment and retrieve a portfolio specified by the user terminal code segment from a database; and

a pagination engine module code segment, in communication with the web server module code segment, to create the HTML page and applet code segment based on the portfolio selected and the size of the screen on a user terminal.

20. A system to receive a plurality of real-time data values from a content provider and transmitting the real-time data values to a user terminal, comprising:

a user terminal to receive real-time data values; and

a real-time data server to receive real-time data values from a content provider, determine if the real-time data values have changed from prior real-time data values and transmit the real-time data values to the user terminal when the real-time data values have changed from the prior real-time data values.

21. The system recited in claim 20, wherein the real-time data server further comprises:

a hash table storing the prior real-time data values and being updated when the real-time data values from the content provider have changed from the prior real -time data values.

22. The system recited in claim 21, wherein the real-time data server further comprises:

a web engine server module to access a database having a portfolio generated by a user and generate an HTML page and applet, wherein upon receipt of a connection request from the user terminal the web engine server module downloads the HTML page and applet to the user terminal.

23. The system recited in claim 21, wherein the real-time data server further comprises:

a source filter server module to receive real-time data values from the content provider and determine if the real-time data values have changed from prior real-time data values stored and table, and activate a data thread when the real-time data values have changed from prior real-time data values.

24. The system recited in claim 23, wherein the real-time data server further comprises:

a real time data server module to communicate between the user terminal and the source filter server module through the data server thread.

25. The system recited in claim 24, where and source filter server module further comprises:

a source filter module to receive the real-time data values from the values content provider; and update hash table.

26. The system recited in claim 21, wherein the user terminal further comprises:

a HTML page Java scripts to display a screen on the user terminal and; and

an embedded applet to update the screen on the terminal when the time data values are received from the real-time data server.

27. The computer program recited in claim 22, wherein the web engine server module further comprises:

a web server module to communicate to the user terminal and retrieve a portfolio specified by the user terminal from a database; and

a pagination engine module, in communication with the web server module, to create the HTML page and applet based on the portfolio selected and the size of the screen on the user terminal.